

INTERNATIONAL SEARCH REPORT

International Application No

PCT/JP2004/017985

A. CLASSIFICATION OF SUBJECT MATTER
H01L31/Q2 H01L31/Q5 H01L31/O48

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
H01L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	PATENT ABSTRACTS OF JAPAN vol. 013, no. 097 (E-723), 7 March 1989 (1989-03-07) & JP 63 271978 A (SHARP CORP), 9 November 1988 (1988-11-09) abstract -----	1, 4, 10
A	PATENT ABSTRACTS OF JAPAN vol. 1999, no. 05, 31 May 1999 (1999-05-31) & JP 11 031715 A (MATSUSHITA ELECTRIC IND CO LTD), 2 February 1999 (1999-02-02) abstract ----- - / "	1, 8, 10, 17

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

31 October 2005

Date of mailing of the international search report

20. 01. 2006

Name and mailing address of the ISA

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
A	PATENT ABSTRACTS OF JAPAN vol. 2000, no. 16, 8 May 2001 (2001-05-08) & JP 2001 025891 A (MATSUSHITA ELECTRIC IND CO LTD), 30 January 2001 (2001-01-30) abstract -----	1, 8, 10, 17
A	PATENT ABSTRACTS OF JAPAN vol. 017, no. 199 (E-1352) , 19 April 1993 (1993-04-19) -& JP 04 343481 A (CANON INC) , 30 November 1992 (1992-11-30) abstract; figures 1,3-6 -----	1, 2, 4, 5, 10, 12-14
A	PATENT ABSTRACTS OF JAPAN vol. 1999, no. 13, 30 November 1999 (1999-11-30) & JP 11 214733 A (KYOCERA CORP) , 6 August 1999 (1999-08-06) abstract -----	1, 10
A	PATENT ABSTRACTS OF JAPAN vol. 2002, no. 04, 4 August 2002 (2002-08-04) & JP 2001 345458 A (KYOCERA CORP) , 14 December 2001 (2001-12-14) abstract; figure 1 -----	1, 10
A	US 5 478 402 A (HANOKA ET AL) 26 December 1995 (1995-12-26) -----	

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Information on patent family members

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Patent document cited in search report		Publication date		Patent family member(s)		Publication date
JP 63271978	A	09-11-1988	NONE			
JP 11-01715	A	02-02-1999	JP	3425332 B2		14-07-2003
JP 2001-05891	A	30-01-2001	NONE			
JP 04343481	A	30-11-1992	EP	2768566 B2		25-06-1998
JP 11214733	A	06-08-1999	NONE			
JP 2001345458	A	14-12-2001	NONE			
US 5478402	A	26-12-1995	AU	1840695 A		04-09-1995
			DE	69532904 D1		27-05-2001
			DE	69532904 T2		02-09-2004
			EP	0694213 A1		31-01-1996
			HK	1014400 A1		14-01-2005
			WO	9522843 A1		24-08-1995

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Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.

2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-18

Remark on Protest

The additional search fees were accompanied by the applicant's protest.

No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-18

Solar cell module comprising a plurality of solar cells sealed into a filler and electrically connected to each other by inner leads connecting a bus bar electrode of one cell to the bus bar electrode of an adjacent cell, whereby an edge along the longitudinal direction of the bus bar electrode and a portion from the edge to a predetermined distance inward therefrom are in contact with the filler or are coated with a coating member and the coating member is in contact with the filler.

2. claims: 19-22

Solar cell module comprising a plurality of solar cells electrically connected to each other by inner leads connecting with a solder a bus bar electrode of one cell to the bus bar electrode of an adjacent cell, whereby the solder contains Sn and its composition satisfies the equation defined in claim 19.

3. claims: 23-26

Solar cell module comprising a plurality of solar cells electrically connected to each other by inner leads connecting a bus bar electrode of one cell to the bus bar electrode of an adjacent cell, an outer lead connected to ends of the plurality of solar cells and a coupling wiring for connecting the outer leads, whereby the outer lead and the coupling wiring are electrically connected with a solder composed of Sn, Ag and Cu and the bus bar electrodes and the inner leads are electrically connected with a solder composed of Sn, Bi and Ag.
